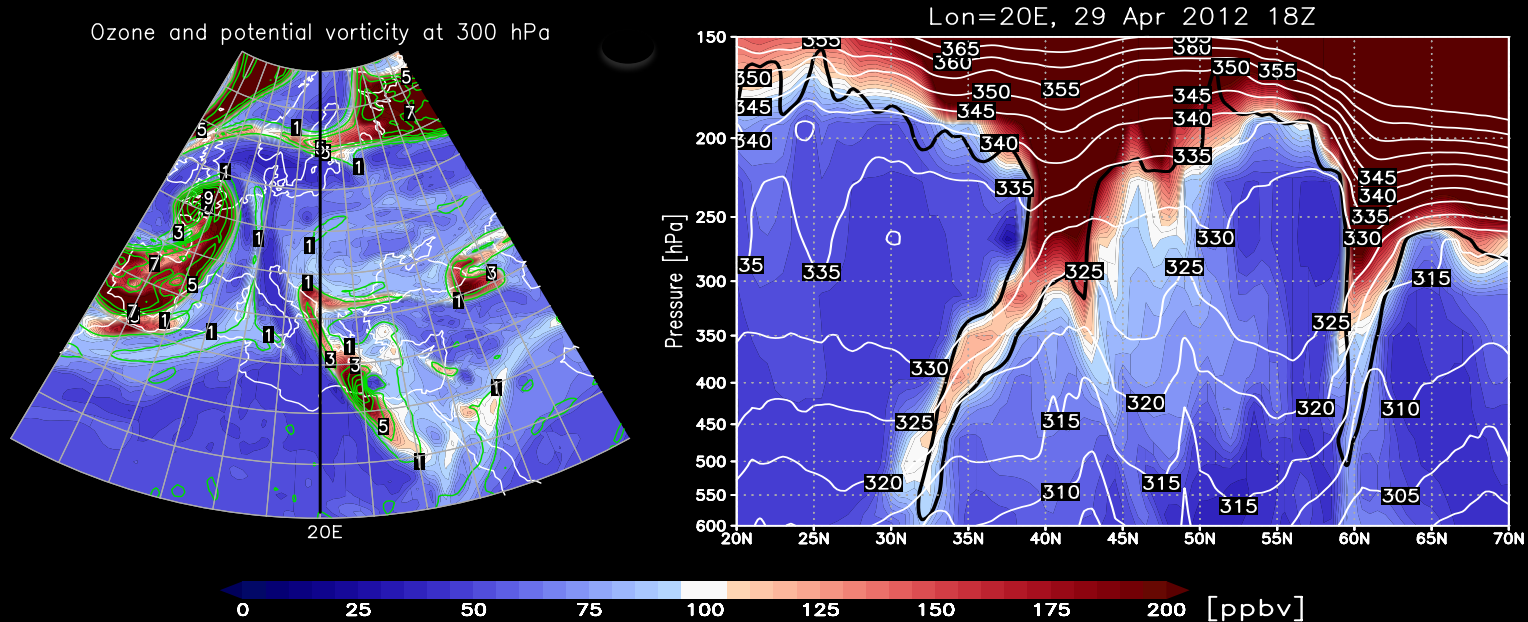


A Stratospheric Intrusion Event on 29 April 2012 Captured by the MERRA-2 Reanalysis



This transect of ozone, potential vorticity and potential temperature fields, from the Modern Era Retrospective Analysis – 2 (MERRA-2) reanalysis, shows a stratospheric intrusion event over Europe (20° E) on 29 April 2012. In this event, air from the stratosphere with high ozone mixing ratios (represented in red) are transported into the lower troposphere, where the ambient mixing ratios are lower (represented in blue). The transport from the stratosphere is also highlighted by the dynamical tropopause (the 2-potential-vorticity-unit contour, shown in black) being distorted, with the white isopleths showing the potential temperature.